STATE OF MARYLAND

DHMH

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January 21, 2009
Public Health & Emergency Preparedness Bulletin: # 2009:02
Reporting for the week ending 01/17/09 (MMWR Week #02)

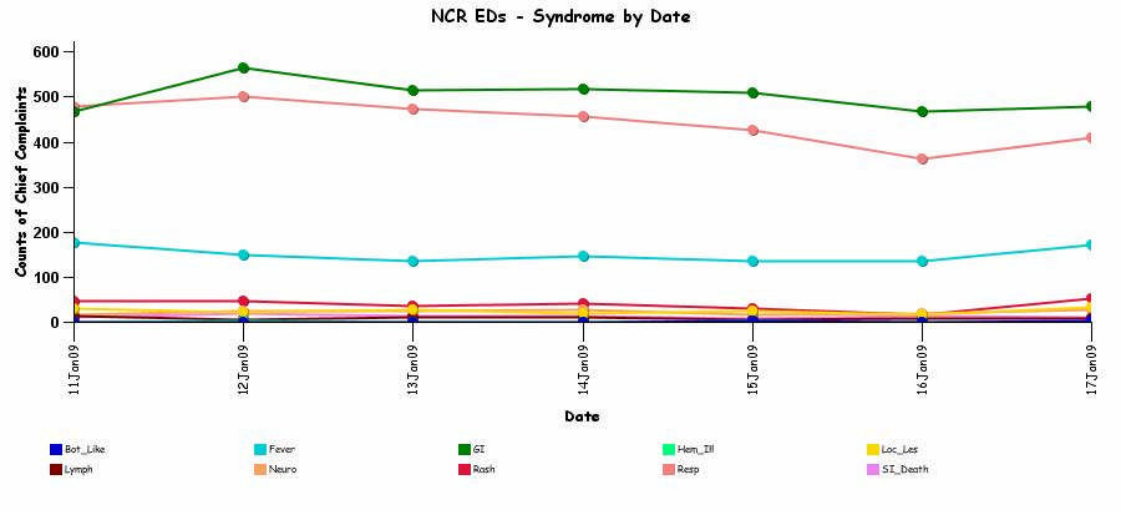
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

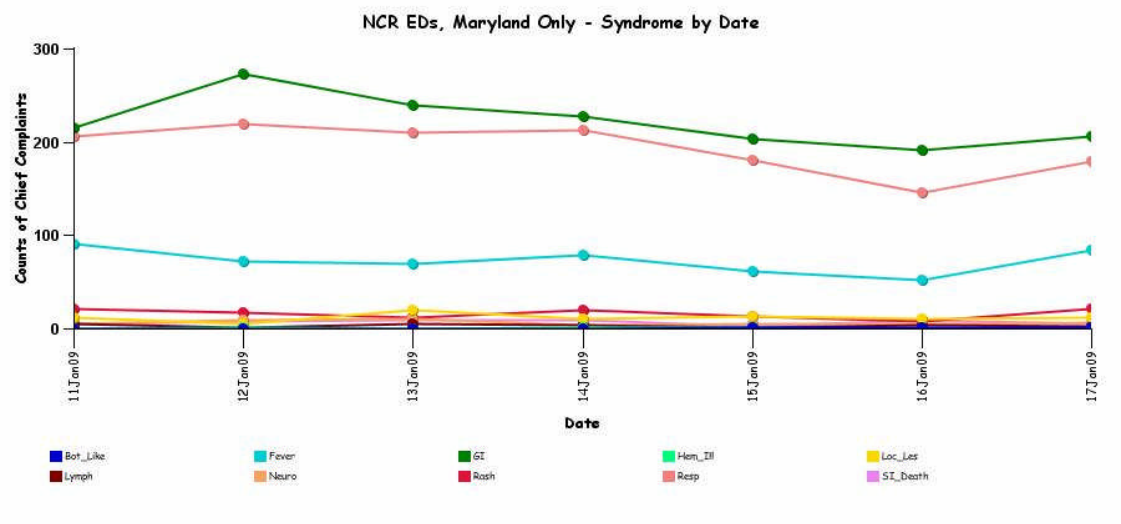
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

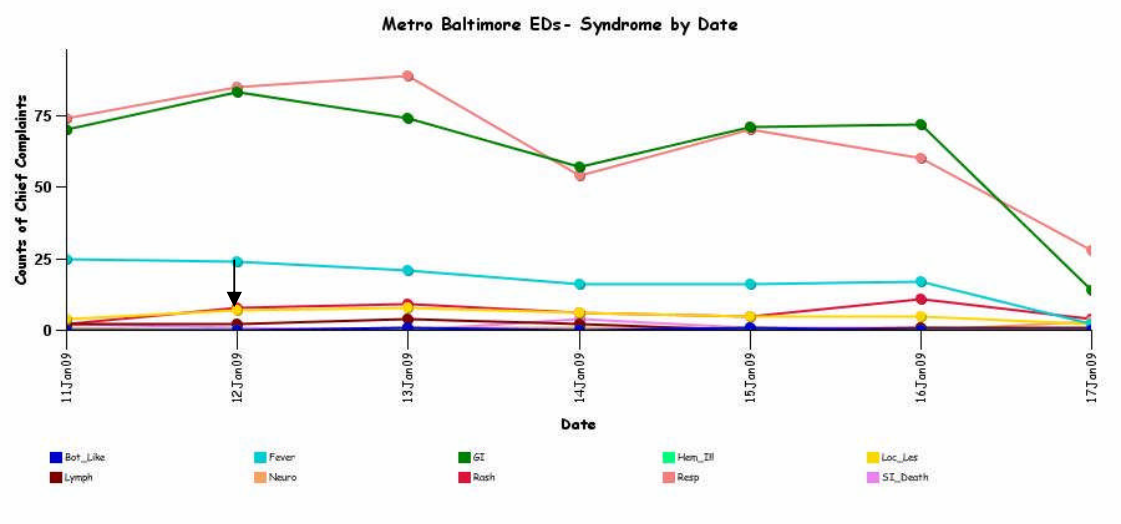
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.



* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.

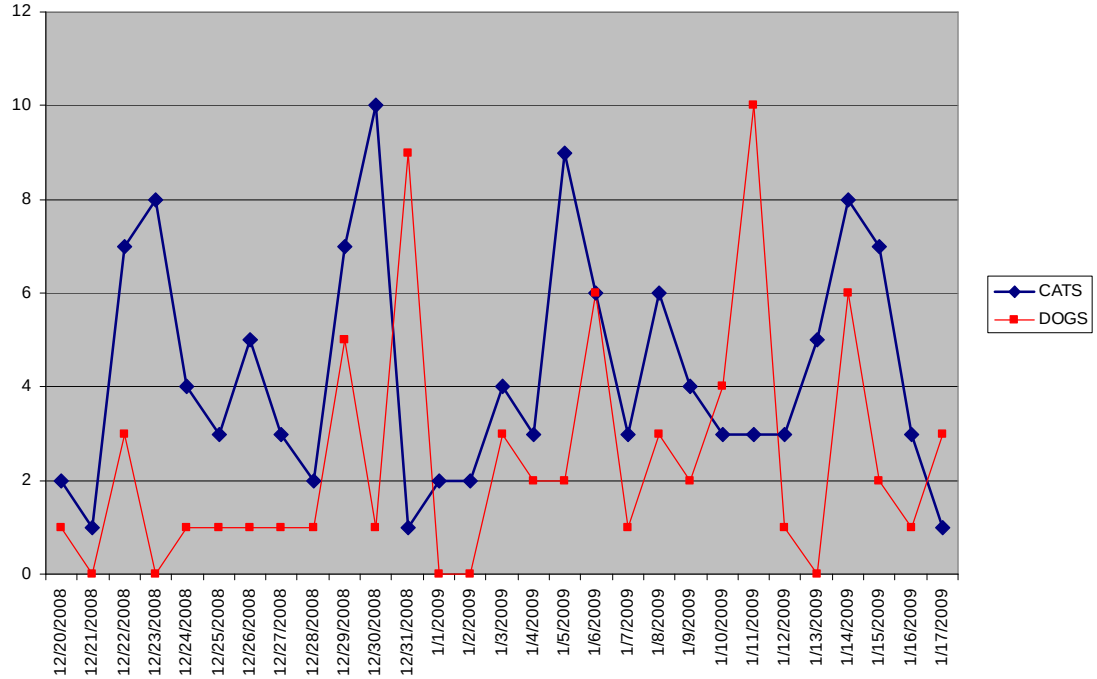


* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

****NOTE: Not all data for Metro Baltimore hospitals was available for January 17, 2009 due to technical issues****

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

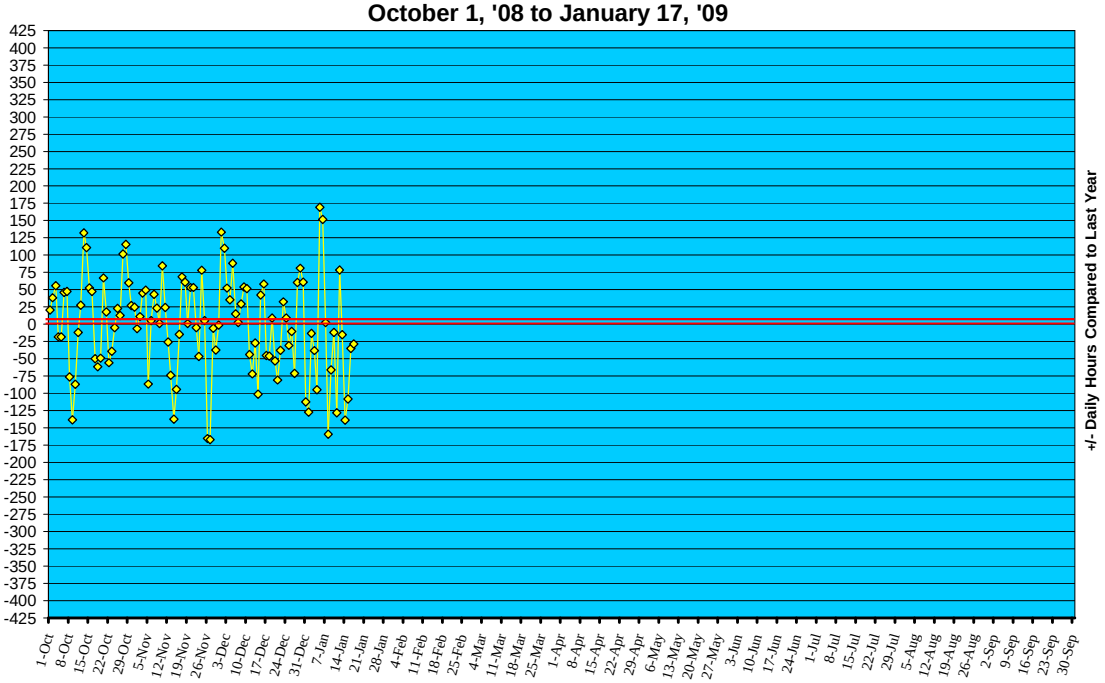
Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/08.

Statewide Yellow Alert Comparison
Daily Historical Deviations
October 1, '08 to January 17, '09



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (Jan 11 to Jan 17, 2009):	14	0
Prior week (Jan 4 to Jan 10, 2009):	12	0
Week#2, 2008 (Jan 6 to Jan 12, 2008):	2	0

10 outbreaks were reported to DHMH during MMWR Week 2 (Jan. 11- Jan. 17, 2009):

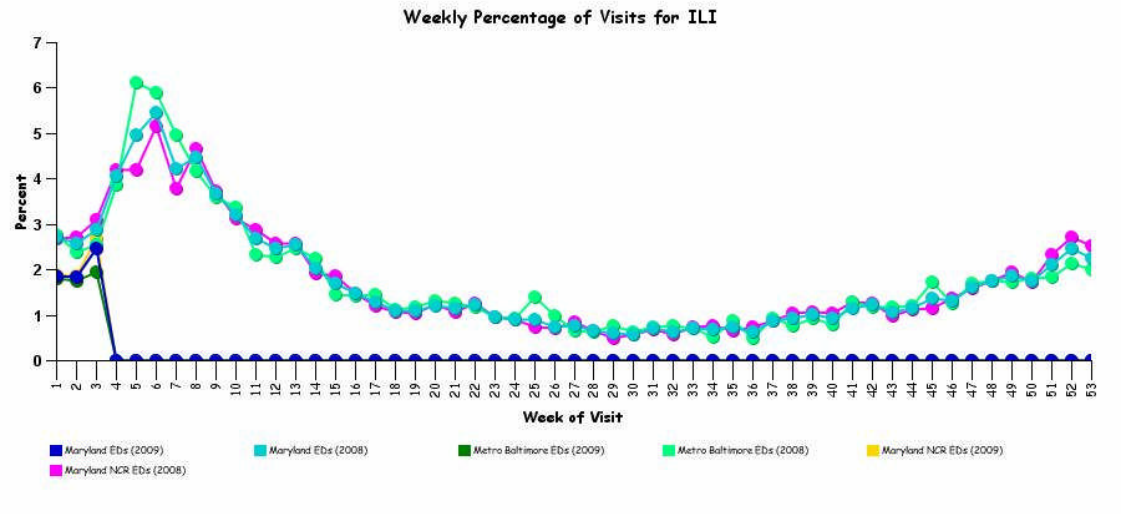
10 Gastroenteritis outbreaks
5 outbreaks of GASTROENTERITIS associated with Nursing Homes
5 outbreaks of GASTROENTERITIS associated with Assisted Living Facilities

MARYLAND SEASONAL FLU STATUS:

Influenza activity in Maryland for Week 02 is LOCAL. During week 02, 41 confirmed cases of influenza were reported to DHMH.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:

http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of January 19, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 397, of which 249 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA, FIRST OUTBREAK (NEPAL): 16 Jan 2009. For the 1st time in Nepal, bird flu virus has been detected in Kakarbhitta in the eastern district of Jhapa. After the detection of bird flu virus, the government on Thursday [15 Jan 2008] decided to cull birds within the range of 3 km [1.8 miles] from the site. Declaring the 10 km [6.2 mile] region of Kakarbhitta 'an emergency area,' the cabinet meeting took the decision to kill the birds today as 6 out of every 7 chickens brought from Mechi Municipality-10, Kakarbhitta, were found to have been infected with the avian flu. The meeting has decided to be on a high alert at the areas ranging 10 km from Kakarbhitta to prevent the bird flu from spreading, the minister for information and communications Krishna Bahadur Mahara said. He added that the government has also decided to direct the local administration to reuse the equipment used in slitting the birds only after the sterilization process. The meeting was held at the prime minister's office in Singhadurbar. Meanwhile, the Ministry of Agriculture is due to give more information on the detection of bird flu in Kakarbhitta at a press conference at the ministry.

AVIAN INFLUENZA, HUMAN (EGYPT): 14 Jan 2009. The Ministry of Health and Population of Egypt has announced a new human case of avian influenza A(H5N1) virus infection. The case is a 21 month old girl from the 6th of October Governorate, Kerdasa District, whose symptoms began on 9 Jan 2009. She was initially hospitalized on 10 Jan 2009 and is currently in a stable condition. Infection with the H5N1 avian influenza virus was diagnosed by PCR at the Egyptian Central Public Health Laboratory and subsequently confirmed by the US Naval Medical Research Unit No. 3 (NAMRU-3) laboratories. Investigations into the source of her infection indicate a recent history of contact with sick and dead poultry. Of the 52 cases confirmed to date in Egypt, 23 have been fatal.

NATIONAL DISEASE REPORTS:

BRUCELLOSIS, CERVIDS (MONTANA): 17 Jan 2009. Montana wildlife officials killed 2 radio-collared cow elk near Gardiner that had tested positive for exposure to brucellosis, a bacterial disease that can cause pregnant cattle, bison and elk to abort calves. The rest of the elk herd, which tested negative, will be allowed to continue grazing in the Paradise Valley and south-central portions of Yellowstone National Park, where they spend most of the spring, summer and fall, Ron Aasheim, spokesman for the Montana Department of Fish, Wildlife and Parks (FWP), said on Wednesday [14 Jan 2009]. So far, only wildlife near Yellowstone have tested positive for brucellosis, Aasheim said. "We have not found brucellosis anywhere else," he said. Officials have known for years that elk carry the disease and can transmit it to cattle and bison. But after finding it in 2 different cattle herds during the past year [2008], causing Montana to lose its brucellosis-free status, state wildlife experts have ramped up efforts to track the disease. Since 1981, FWP has tested nearly 7000 elk for brucellosis, mostly north and west of Yellowstone Park. But this year, after the National Veterinary Service said elk were the likely culprits infecting cattle, FWP expanded efforts to collect blood samples from hunter-harvested elk in south western Montana. And the agency is working toward implementing better tracking systems, Aasheim said, "collaring another bunch of elk as we speak." Existing tests show that up to 5 per cent of the elk grazing in and near the park have been exposed to brucellosis. Fewer than half of those infected are capable of passing it on, said state veterinarian Marty Zaluski. But cattle ranchers, nervous about the disease, are asking the state to increase elk-monitoring efforts, said Errol Rice, executive vice president of the Montana Stockgrowers Association. By better understanding the disease, the FWP aims to limit cattle-wildlife interactions during late-winter and spring months when the potential for transmission is highest, rather than targeting brucellosis-positive elk for removal, Aasheim said. And although brucellosis may be more visible now with increased testing, the threat to Montana cattle likely has not increased, Aasheim said. "I don't think the threat is any greater than it's ever been," Aasheim said. While it's no surprise the disease popped up this week, Rice said ranchers need to be vigilant and lobby the state to fund wildlife testing, to help ensure cattle herds stay healthy. "Just hunters alone are not going to be able to give adequate numbers," Rice said. "We can always do more." On Monday, the Montana Board of Livestock approved an "action plan" to limit transmission of the disease among cattle, requiring cattle in a 7-county area considered high risk be tested, largely based on exposure to elk and bison. And Zaluski said the state's various efforts to halt the disease are paying off. "We've made a fair amount of progress in a short amount of time," Zaluski said. "But we still have a way to go." The 2 elk killed on Tuesday were tested last spring [2008] and found to be carrying the disease, but Montana wildlife officials waited until the animals left the park before putting them down. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE TYPHIMURIUM, PEANUT BUTTER (USA): 15 Jan 2009. As of 9pm EDT, Wed 14 Jan, 2009, 448 persons infected with the outbreak strain of _Salmonella [enterica_ serotype] Typhimurium have been reported from 43 states. The number of ill persons identified in each state is as follows: Alabama (1), Arizona (8), Arkansas (4), California (60), Colorado (10), Connecticut (8), Georgia (6), Hawaii (1), Idaho (10), Illinois (5), Indiana (3), Iowa (1), Kansas (2), Kentucky (3), Maine (4), Maryland (7), Massachusetts (40), Michigan (25), Minnesota (33), Missouri (8), Mississippi (1), Nebraska (1), New Hampshire (11), New Jersey (18), New York (18), Nevada (5), North Carolina (1), North Dakota (10), Ohio (57), Oklahoma (2), Oregon (5), Pennsylvania (13), Rhode Island (4), South Dakota (2), Tennessee (8), Texas (6), Utah (3), Vermont (4), Virginia (20), Washington (13), West Virginia (2), Wisconsin (3), and Wyoming (2). Among the 432 persons with dates available, illnesses began between 8 Sep 2008 and 31 Dec 2008. Patients range in age from less than 1 to 98 years; 48 percent are female. Among persons with available

information, 22 percent reported being hospitalized. Infection may have contributed to 5 deaths. The epidemic curve [on the original URL - Mod.LL] shows that most illnesses began after 1 Oct 2008. Illnesses that occurred after 14 Dec 2008 may not yet be reported due to the time it takes between when a person becomes ill and when the illness is reported. This takes an average of 2-3 weeks. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

EBOLA-RESTON, PORCINE (PHILIPPINES): 17 Jan 2009. Blood samples from swine and farmhands in the Philippines have been sent to the Centers for Disease Control and Prevention in the United States to test for the Ebola-Reston virus, health secretary Francisco Duque said on Friday [16 Jan 2009]. The samples were collected by a joint team from the Food and Agriculture Organisation [FAO], the World Organisation for Animal Health [OIE], and the World Health Organization [WHO] from 2 pig farms where the Ebola-Reston virus had been detected. "I have directed the RITM (Research Institute of Tropical Medicine of the Philippines) to immediately send the collected samples from the 2 farms to CDC for testing," Duque said. "We expect the results to come out any time in the next few weeks, he added. Dr Lyndon Leesuy, a member of the Philippine team involved in the investigation, said that sending the samples to CDC in Atlanta, Georgia, was not a sign that they were positive for the Ebola-Reston virus. "It's just for confirmation and thorough laboratory analysis," because the Philippines does not have the facilities to conduct such tests, said Leesuy. The Agriculture Department is still maintaining its quarantine on the 2 farms as well as the voluntary ban on the export of pork until the results of the CDC tests are released, officials said. Ebola-Reston, which is found only in the Philippines, had been confined to monkeys and the latest outbreak among pigs is the 1st time it has jumped species. As of December [2008], nearly 6000 pigs at the farms in Pandi and Talavera town outside Manila had tested positive for the virus, which is not known to be harmful to humans but could have a devastating impact on the pig industry. Ebola-Reston is different from the Ebola sub-types found in Africa that cause deadly haemorrhagic fever in humans. Ebola-Reston was 1st detected in 1989 in laboratory monkeys sent from the Philippines to Reston, Virginia, in the US. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

BOTULISM, AVIAN (AUSTRALIA): 17 Jan 2009. Birds sick with a paralytic disease from the ingestion of toxins have been found in Perth lakes and parks. The City of Belmont said several appear to have been affected by avian botulism, which causes paralysis of the legs, wings and neck. The 1st sign is usually a drooping head. Birds may drown, fall to predators, or suffocate due to paralysis of the respiratory system. A number of sick waterbirds have been found at the lakes of Centenary Park, Tomato Lake and Faulkner Park -- all in Belmont. Treatment involves tube feeding to flush toxins from the bird's system. The bacteria causing avian botulism thrive in warm conditions, with stagnant water and high nutrient levels. Bird feeding is one of the contributing factors that results in high nutrient levels in waterways. The bread that is fed to birds contains between 1 and 2 grams of phosphorus. This is enough to make a volume of lake water the size of a backyard swimming pool nutrient-rich. Mayor Glenys Godfrey said locals and visitors to the area need to stop feeding the birds to prevent the occurrence of botulism. "If you need to feed birds feed them snails and worms instead of bread," she said. "The city would also like to urge you to report any sick birds to our Environment Team on 9477 7295, who can contact nearby wildlife carers who treat avian botulism." (Botulism is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

BOTULISM, AVIAN (FINLAND): 17 Jan 2009. A botulism outbreak has struck a poultry farm in western Finland. Authorities report that a large number of birds have already died from the illness. The remaining infected birds are to be culled. The Finnish Food Safety Authority (Evira) said the birds were infected with the _Clostridium botulinum_ bacterium, which causes botulism. The poultry exhibited typical symptoms associated with the disease. Evira officials would not disclose the exact location of the farm. Botulism is rarely found in animals in Finland. (Botulism is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, LIVESTOCK (ZIMBABWE): 16 Jan 2009. The World Health Organization (WHO) has reported some 200 human cases of anthrax since November 2008 with 8 confirmed deaths. These cases were attributed to the ingestion of animals (cattle and goats) that had died of anthrax. Zimbabweans avoid eating animals that have died of disease, but these cases appear to [have] occurred in starving rural people scavenging carrion. Physicians for Human Rights (PHR) was told that veterinary anthrax control programs in Zimbabwe, which had included regular monthly control programs, have been dramatically curtailed in the economic collapse. The surviving herds are now much more vulnerable to infectious diseases. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

EBOLA HEMORRHAGIC FEVER (DEMOCRATIC REPUBLIC OF THE CONGO): 15 Jan 2009. Seven more people have tested positive [by laboratory testing] for the deadly Ebola virus in the Democratic Republic of the Congo [Congo DR], bringing the toll of suspected and confirmed cases to 46, according to the medical group Medecins sans Frontieres [Doctors without Borders]. 14 people have died, all exhibiting symptoms of the hemorrhagic fever, but only one of the deaths has been confirmed [by laboratory analysis] as resulting directly from Ebola virus infection. The deaths were all in western Kasai [Kasai Occidental province], a remote province where about 187 people died of Ebola fever last year [2008]. Ebola kills up to 90 per cent of the people it infects and is spread through direct contact with blood and secretions, or via contaminated objects. On Tue 6 Jan 2009, neighbouring Angola shut down its north eastern border with the Democratic Republic of the Congo in a bid to stop the spread of the deadly Ebola virus. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, BOVINE (INDONESIA): 13 Jan 2009. Sumbawa regency administration in West Nusa Tenggara (NB) has stopped the movement of all cattle in and out of 2 districts, Labangka and Moyohulu, after some livestock showed possible signs of anthrax contamination. Cases of anthrax in cows were documented in those districts in 2008. It is unclear whether the current suspects cases may be confirmed. "Recently we found several signs of anthrax in cows in the districts. We decided to stop cattle traffic as a preventive measure," Sumbawa Regent Jamaluddin Malik said on Tuesday [13 Jan 2009]. Jamaluddin said the recent indications cropped up during the rainy season; the 2008 cases occurred at the same time last year [2007]. "We are going to halt the traffic for 2 to 3 months. We'll be monitoring developments," he said. Sumbawa is one of Indonesia's primary cattle production areas, delivering at least 900 cows and 3000 calves to other regions in the country, including Jakarta, South Kalimantan, South Sulawesi, and West Sumatra. According to 2007 provincial data, there were 102 000 cows and 64 000 buffalo in NB. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, EQUINE (RUSSIA): 13 Jan 2009. There have been 11 cases of anthrax reported in East Siberia, and the patients hospitalized in recent weeks. Government officials claim the disease was initially found in some horses and cattle in the area. Two horses have been reported dead through anthrax. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (SRI LANKA, INDONESIA): 12 Jan 2009. The number of chikungunya patients reported from Moneragala is 1300 since the latest outbreak was reported at the end of December 2008. The number of patients reported from Embilipitiya in the Ratnapura district is 1106 while another 200 patients have been reported from Polonnaruwa and the outbreak is now dwindling, deputy epidemiologist, Dr Paba Palihawadana said. Healthcare and Nutrition Ministry sources said between 300 to 400 patients were reported per day during the 1st few days of the outbreak. About 3000 Chikungunya patients have been discovered from affected areas.Provincial health director Dr Kapila Kannangara said arrangements have been made to destroy all mosquito breeding centres. A card has been issued to all households to conduct weekly monitoring, which will be carried out by public health inspectors. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

CDC has issued interim guidelines for the use of Oseltamivir (Tamiflu) in influenza cases. The guidelines can be found at http://www.cdc.gov/flu/professionals/antivirals/index.htm

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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